AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows. This listing of claims will replace all prior listings.

1. (ORIGINAL) A fuel system comprising:

a fuel channel;

an oxygen receiving channel; and

an oxygen permeable porous membrane in communication with said fuel channel and said oxygen receiving channel.

2. (ORIGINAL) The fuel system as recited in claim 1, wherein said oxygen permeable porous membrane is generally parallel to said fuel channel and said oxygen receiving channel.

3. (ORIGINAL) The fuel system as recited in claim 1, wherein said oxygen permeable porous membrane is non-perpendicular to said fuel channel.

4. (ORIGINAL) The fuel system as recited in claim 1, wherein said oxygen receiving channel communicates an inert gas therethrough.

5. (ORIGINAL) The fuel system as recited in claim 1, wherein said fuel channel communicates a liquid fuel containing a dissolved oxygen therethrough, said oxygen permeable porous membrane operable to separate the dissolved oxygen from the fuel.

6. (ORIGINAL) The fuel system as recited in claim 1, wherein said oxygen permeable porous membrane is unsupported.

7. (ORIGINAL) The fuel system as recited in claim 1, wherein said fuel channel communicates a liquid fuel in a first direction and said oxygen receiving channel communicates a gas in a direction opposite the first direction.

8. (ORIGINAL) The fuel system as recited in claim 1, further comprising a pressure differential across said oxygen permeable porous membrane, said pressure differential lower than a capillary force of the fuel within a pore of said oxygen permeable porous membrane.

9. (ORIGINAL) The fuel system as recited in claim 1, wherein said oxygen receiving channel comprises a sweep gas.

10. (ORIGINAL) The fuel system as recited in claim 1, wherein said oxygen receiving channel comprises a vacuum.

11. (ORIGINAL) A fuel system comprising:

a fuel channel;

an oxygen receiving channel; and

a gas/fuel contactor in communication with said fuel channel and said oxygen receiving channel.

12. (ORIGINAL) The fuel system as recited in claim 11 further comprising a fuel condenser in communication with said oxygen receiving channel.

13. (ORIGINAL) The fuel system as recited in claim 11, further comprising a sweep gas reservoir in communication with said oxygen receiving channel.

14. (ORIGINAL) The fuel system as recited in claim 11, further comprising a second gas/fuel contactor in communication with said fuel channel and said oxygen receiving channel, said second gas/fuel contactor in series with said gas fuel contactor.

15. (ORIGINAL) The fuel system as recited in claim 14, wherein said second gas/fuel contactor receives fuel at a fuel temperature greater than a fuel temperature of said gas/fuel contactor.

16. (ORIGINAL) The fuel system as recited in claim 11, wherein said gas/fuel contactor comprises an unsupported oxygen permeable porous membrane in communication with said fuel channel and said oxygen receiving channel.

17. (ORIGINAL) A method of minimizing dissolved oxygen from within a fuel system comprising the steps of:

(1) locating an oxygen permeable porous membrane adjacent a liquid fuel flow containing a dissolved oxygen; and

(2) flowing a sweep gas along the oxygen permeable porous membrane to draw the oxygen through the oxygen permeable porous membrane.

18. (ORIGINAL) A method as recited in claim 17, wherein said step (2) further comprises the steps of:

flowing the gas in a direction opposite a direction of the liquid fuel flow.

19. (ORIGINAL) A method as recited in claim 17, wherein said step (1) further comprises

locating the oxygen permeable porous membrane non-perpendicular to said fuel flow.

20. (ORIGINAL) A method as recited in claim 17, further comprising the steps of:

maintaining a pressure differential across the oxygen permeable porous membrane, the pressure differential lower than a capillary force of the fuel within a pore of the oxygen permeable porous membrane.

21. (ORIGINAL) A method as recited in claim 17, further comprising the steps of:

maintaining a pressure differential across the oxygen permeable porous membrane, the pressure differential comprising a pressure on the sweep gas side lower than a pressure on the fuel side.

22. (ORIGINAL) A method as recited in claim 17, further comprising the steps of:

communicating the sweep gas to a fuel condenser downstream of the oxygen permeable porous membrane; and

condensing the fuel from within the sweep gas.

23. (NEW) The fuel system as recited in claim 1, wherein said oxygen receiving channel maintains a pressure differential across the oxygen permeable porous membrane, the pressure differential lower than a capillary force of a fuel within a pore of the oxygen permeable porous membrane.

24. (NEW) The fuel system as recited in claim 1, wherein a pressure differential defined across the oxygen permeable porous membrane provides a pressure within the oxygen receiving channel lower than a pressure within the fuel channel.